

Adopted: May 21 2013

**ACADEMIC SENATE
of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, CA**

AS-761-13

**RESOLUTION ON CHANGE OF ADMINISTRATIVE STATUS
FOR WINE AND VITICULTURE PROGRAM**

- 1 WHEREAS, Wine and Viticulture is currently an interdepartmental major within the College of
2 Agriculture, Food and Environmental Sciences (CAFES); and
3
4 WHEREAS, The mission, curricula, goals, and strategic vision for Wine and Viticulture are distinction
5 from those of the Agribusiness, Food Science and Nutrition, and Horticulture and Crop
6 Science Departments; and
7
8 WHEREAS, The program is operating autonomously from the Agribusiness, Food Science and
9 Nutrition, and Horticulture and Crop Science Departments; and
10
11 WHEREAS, A change in status and name from Wine and Viticulture program to "Wine and Viticulture
12 Department" is being proposed; and
13
14 WHEREAS, The functional modifications in changing to department status are provided in the
15 attachment to this resolution; and
16
17 WHEREAS, Said change in status and name has been approved by the College of Agriculture, Food
18 and Environmental Sciences department chairs/heads, the CAFES Dean, and the
19 Academic Deans Council; therefore be it
20
21 RESOLVED: That the Academic Senate of Cal Poly endorse the change in status and name from Wine
22 and Viticulture program to **Wine and Viticulture Department**.

Proposed by: Wine and Viticulture Program
Date: April 16 2013

State of California
M e m o r a n d u m



To: KathleenENZ Finken, Provost, Cal Poly **Date:** March 25, 2013

Via: Dave Wehner, Dean, CAFES

From: James B. Cooper, Director,
Wine and Viticulture Program

Subject: Proposal for Wine and Viticulture Program Change to
Department Status

Overview

The Cal Poly Wine and Viticulture Program is an integrative three-pronged program aimed at educating future leaders of the global grape and wine industry. The Program arose from a collaboration among three departments in CAFES: Agribusiness, Food Science and Nutrition, and Horticulture and Crop Science. It currently offers an interdisciplinary major in Wine and Viticulture designed to prepare students for successful careers in the complex 21st century global wine business environment. Program curriculum emphasizes the inherent connectivity between wine grape growing in the vineyard, wine making in the winery, and wine selling in the marketplaces, uniquely integrating these three fundamental components of the modern wine industry. The Wine and Viticulture faculty believe that an understanding of all three aspects is critical in the unique legal and regulatory environment in which the wine industry operates.

Compared to other academic wine programs around the country, an emphasis on all three aspects of the wine industry provides a unique advantage that distinguishes the Cal Poly program. All Wine and Viticulture majors learn the foundations of viticulture through lectures and labs that use the campus 15-acre Trestle Vineyard. Students learn winemaking through lecture and lab courses using the campus pilot winery and teaching labs in FSN and Biology. Students also learn some essentials of marketing and sales, with the potential to develop and manage the Cal Poly Wine brand. The Program incorporates Learn by Doing throughout its curriculum. All students are required to complete (at least) one internship in the grape and/or wine industry and a senior "capstone" project, and are encouraged to participate in undergraduate research. The Vines to Wines student club provides networking opportunities with industry professionals through volunteering for many local wine industry events.

1980's -1990's Individual Courses and Extended Education	1996 Vines to Wines Club	1999 WVIT Minor	2004 WVIT Major	2013? WVIT Department
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BACKGROUND

History of Wine and Viticulture at Cal Poly

Courses in viticulture, sensory analysis, and wine business have been offered at Cal Poly since the 1980's through the Agribusiness, Food Science and Nutrition, and Crop Science Departments, and through Extended Education. A wine certificate program was developed through Extended Education in the 1990's, and continues today. (Until recently, this wine certificate program has had minimal coordination with the Wine and Viticulture Program in CAFES, though great potential exists for a more formal and extensive collaboration with Extended Education). Also during the 1990's, Fruit Science viticulture courses, Food Science courses in sensory evaluation and fermentation, and Agribusiness courses in wine business were all heavily enrolled. Experiences in wine and viticulture through these individual courses generated a high level of student passion for wine and the wine industry, and led to the foundation of a student club, Vines to Wines, in 1996. Over the years, the V2W club has attracted scores of students to its biweekly club meetings, providing student networking opportunities with industry professionals, and student volunteers to staff many local wine events. of the Agribusiness Department, provided research supporting the establishment of a distinctive Wine and Viticulture Minor at Cal Poly. In 1999, a Wine and Viticulture minor commenced with a curriculum based on a 1988 senior project by Johnine Przybyla Talley, with Professor Phil Doub. The minor included courses from Food Science and Nutrition (taught by Montecalvo, Noyes, and Lecturers), Horticulture and Crop Science (taught by Fountain, Patterson, Costello, and Lecturers), and Agribusiness (taught by Doub, Amspacher, Wolf, and others). Enrollment in the minor grew rapidly and graduates with the minor found ample employment opportunities in the industry. Many of these Cal Poly graduates have moving rapidly into leadership positions throughout the California wine industry. In 2004 an academic major in Wine and Viticulture was approved and the Wine and Viticulture Program, headed by a Program Director, was formally founded. In 2007, Professor Ritchie was hired into the Food Science department to develop the enology and winemaking curriculum. Doub, Fountain, Montecalvo, Noyes, and Patterson all retired.

Wine and Viticulture Student and Industry Demand

When the Wine and Viticulture Major was initiated in 2004, the Minor had 222 enrolled students (Figure 1). The major rapidly grew to a high of 280 in 2008, including students with double majors from other departments in the College of Agriculture, Food and Environmental Sciences. In 2007 the Wine and Viticulture Program was serving 417 majors and minors (Figure 2). Due in part to the retirement of several key faculty members, most of the required courses became heavily impacted. To effectively serve the majors, the Program

stopped accepting applications for the minor in 2011 and stabilized the number of majors to about 250. In 2012 166 students applied to become Wine and Viticulture majors as freshman, and 84 were accepted with 53 enrolled. In 2012, 67 transfer students applied to Wine and Viticulture, 31 were accepted and 21 enrolled. Of these 74 new majors, 50% are women and 16% are under-represented minorities. In addition there is a consistent demand to enter the Wine and Viticulture major by change of major. Working with our staff advisor (Rachel Johnson), and the faculty recently articulated clear academic expectations for the ICMA process. In addition, the WVIT faculty hope to reopen the Minor after the WVIT Department is formed and additional resources become available.

For a variety of reasons, the 4-year completion rates for WVIT majors is less than optimal. The Program encourages all majors to complete their required internship during the winegrape harvest season in Fall quarter, thus a norm for completion of the B.S. degree is 4 years plus one quarter. Second, many required WVIT courses are heavily impacted. The “hands-on” teaching capacity of the Program faculty in the pilot winery and the vineyard have limited enrollment in essential senior level viticulture and enology courses. Third, the WVIT curriculum relies heavily on specific courses, taught by other departments that are also impacted. Finally, graduation is often delayed because many students choose to work during multiple winegrape harvest seasons.

Figure 1. Enrollments in WVIT Minor and Major since 2004

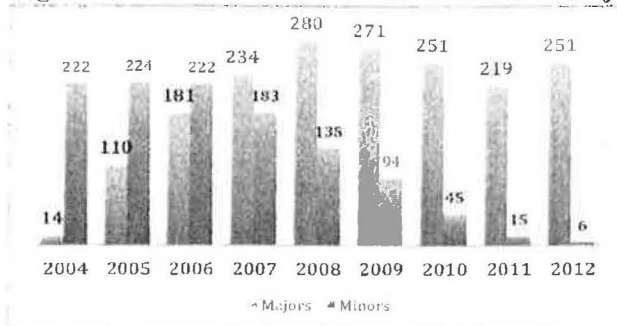
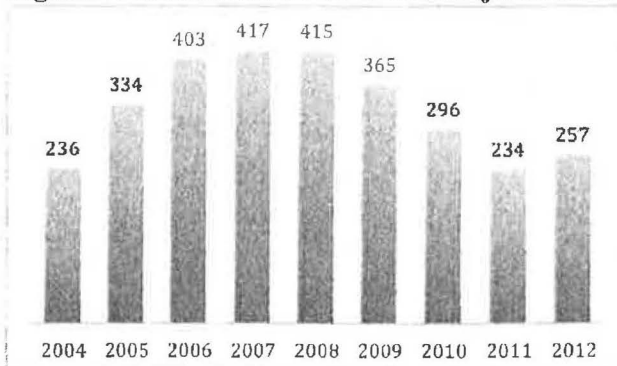


Figure 2: Total numbers of WVIT Majors and Minors

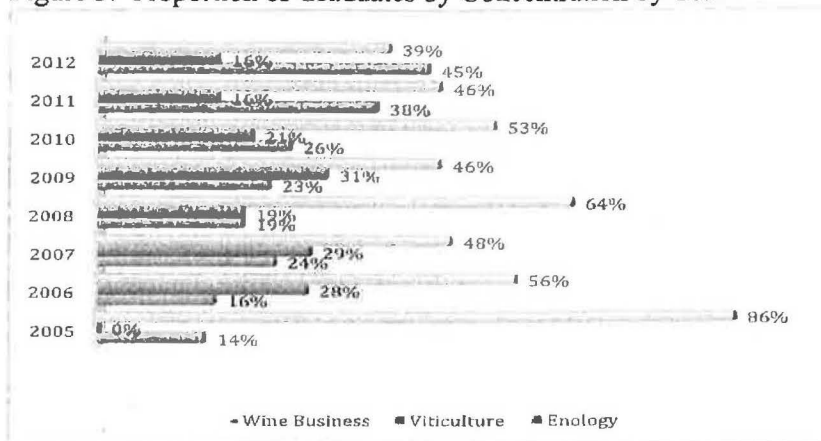


Wine and Viticulture Teaching and Curriculum

All students enrolled in the WVIT major learn the foundations of viticulture, winemaking and wine business through completion of a set of core courses (Appendix I). In addition, each student chooses to focus on one of the three fundamental areas by choosing a concentration, and completing an additional 55 units of upper division specialization courses. Course requirements for Wine and Viticulture majors have evolved significantly over the past eight years, as new courses tailored to the major have been developed and approved. Consequently, the curriculum in each new two-year catalog cycle has been significantly different, though the rapid changes in course requirements are stabilizing.

Initially, the wine business concentration had the highest proportion of graduates, in part because many early majors were originally Wine and Viticulture Minors from the Agribusiness Department. A full-time tenure-track faculty member in the Food Science Department (Ritchie) joined the program in 2007 to further develop and teach enology and sensory courses. Since that time, the proportion of students in the enology concentration has steadily increased, and this concentration now includes 45% of the majors (Figure 3). This shift heavily impacted the enology courses, and in 2011 “double concentrations” were eliminated to the disappointment of many new majors. Such significant shifts in student interest will likely exert a major impact on the needs for teaching resources within a WVIT Department. We hope that development of a dedicated WVIT Department faculty, with strong representation in all three sub-disciplines, will lead long-term stability with roughly equal numbers of students in each concentration.

Figure 3: Proportion of Graduates by Concentration by Year



Currently, there is no generally accepted terminal degree in wine education. The unique Cal Poly undergraduate program provides a tremendous opportunity to develop a new terminal Master of Science degree in Wine and Viticulture. As with the undergraduate major, three concentrations are envisioned that would leverage a number of extant campus strengths.

Enology, for example, might include courses from Biology, Chemistry and Biochemistry, and Statistics, while viticulture could include additional courses in Botany, PPSC, and Business/Management. The wine business emphasis might include additional courses from AGB, RPTA, and the Orfalea College of Business. A longer-term goal is to develop the equivalent of a "wine MBA" that might take the form of an MBA with wine business emphasis. Ample opportunities also exist for a Wine and Viticulture department to collaborate with Extended Education to develop a more formal program of short courses, on-line courses, Certificate programs, "extended field trips" both domestic and international, and international programs. Goals of the new Department include the establishment of a 1-year Professional Masters program catered to industry needs.

RATIONALE FOR A NEW DEPARTMENT

The collaboration among faculty in three cognate departments (Food Science and Nutrition, Horticulture and Crop Science, Agribusiness) was instrumental in the development of the Minor and the Major, and WVIT Program has operated as a collaborative venture among these three departments since its inception. Over the past decade, the wine industry in California and the US has grown rapidly, and enrollment in the WVIT Program has paralleled this rapid growth. Between 2006 and 2011 the dollar value of US wine sales grew by 16.1% to \$34.3 billion (Euromonitor 2012), and a report by Stonebridge Research Group in 2012 indicates Napa Valley wine represents 17 % of the volume and 31% of the value of wine sold in the US (Stonebridge 2012). The report estimates that the wine produced from Napa County alone has an economic impact of \$13.3 billion for Napa County, \$25.9 billion for California and \$50.3 billion for the US economy. The Stonebridge Research Group further estimates that the Napa Appellation alone generates 46,000 full time equivalent jobs in Napa County, 102,000 in California and 303,000 in the Total US. Extrapolating from the Napa forecast generates an estimate of approximately 977,000 US jobs generated by the wine industry. Therefore, the wine industry has been a growth industry in the US, even during the significant national economic downturn, and needs well-educated and trained graduates from programs such as Cal Poly's Wine and Viticulture Program.

The Program's faculty members have reached a level of international prominence with presentations at leading national and international symposia and conferences, publications in peer-review journals, citations, service on editorial boards, and service on key industry boards. WVIT faculty members have received prestigious awards including two Sunkist College of Agriculture Faculty Awards, two Western Agricultural Services Outstanding Agribusiness Faculty Member Awards, and CAFES Outstanding Lecturer Award.

Obtaining departmental status is crucial for the future of Wine and Viticulture at Cal Poly. Currently, the Program Director lacks control over allocation of faculty teaching among the three wine sub-disciplines. Temporary part-time lecturers teaching many required courses in the Wine and Viticulture curriculum cannot be hired directly by the Program, but instead must be hired by each of the cognate departments adding an administrative burden on the cognate departments. Likewise, requisite performance evaluations for lecturers are conducted

independently by each cognate department, adding further to the administrative burden of each department and limiting the input from the WVIT faculty as a whole. Similarly, the RPT process for each tenure-track faculty member is run through each home department, limiting the wine expertise involved in faculty review, and limiting the ability of colleagues in the same program to support each other in the RPT process. Since each WVIT faculty member is also a member of a different department, we all maintain a split dedication to wine and viticulture. Finally, with the exception of the vineyard and pilot winery, the Program has control over no classroom, teaching lab, or research lab space.

A new academic Department will enhance the visibility and independence of Wine and Viticulture at Cal Poly, allowing the department head and faculty to better manage resources and to better serve our students, alumni, and the wine industry. Wine industry leaders have actively supported the WVIT Program both by serving on the Advisory Council, and by donating equipment, wine, grapes and dollars needed for an effective learn by doing wine education. The current Program structure puzzles many members of the Advisory Council. Industry supporters have witnessed the inefficiencies of the administrative and management side of such the current arrangement, and the deleterious impacts this has had on student learning. The Program's Advisory Council and other Cal Poly supporters in the wine industry, students, and faculty all agree that it is in the best interest of efficient resource allocation and compliance with regulations to create a new department with a budget and staff managed by a department head.

Department status is critical for the program to:

- Gain professional credibility within the California wine industry
- Demonstrate campus commitment to Wine and Viticulture at Cal Poly
- Better advocate for faculty resources to serve and support its students
- Effectively recruit outstanding new faculty dedicated to wine and viticulture
- Position itself for obtaining extramural support to serve and support its faculty
- Efficiently manage the campus vineyards
- Efficiently manage the pilot winery and development of a new winery
- Effectively conduct advancement efforts for the Cal Poly Winery and endowed chairs
- Conduct scholarly research in wine and viticulture
- Develop international programs that take advantage of the seasonal harvest/crush (northern hemisphere Summer, Fall; and southern hemisphere Winter, Spring)
- Serve on college and university committees and represent the needs of the department
- Better collaborate with other university wine and viticulture programs (e.g., UC Davis, CSU Fresno)
- Develop a visiting scholar program and a series of regional wine industry gatherings

Resource Implications of a new Wine and Viticulture Department in CAFES

The Program aspires to construct a privately funded campus wine innovation center that would include modest teaching, research, and office space. A campaign to raise ~\$8.9M for

design and construction of a new winery building to house the proposed new department is underway, with ~\$2.7M raised to date.

Additional resources necessary to convert the current program into a new department should be minimal. The Program currently has a small state budget that funds one full-time academic coordinator, and a working budget from College-Base-Fees based on student enrollment. Faculty resources and space provided by each of the cognate departments to teach the Wine and Viticulture curriculum over the past several years will need to transfer into the new WVIT department. Enology courses have involved one tenure-track faculty member and part-time support from several lecturers in the Food Science and Nutrition Department. The Program Director's position is also housed in the FSN Department. Teaching space for enology includes the Pilot Winery and a classroom in the Crops Unit, and teaching laboratories in the Food Science and Biology Departments. A modest research room was also allocated to Enology in Building 11. Teaching of viticulture-related courses has recently involved ~1.3 tenure-track faculty positions together with ~0.8 temporary lecturer position devoted to viticulture lecture, lab and field courses taught in the Horticulture and Crop Science Department. In addition to the campus Trestle vineyard, viticulture courses have used classroom and laboratory space in the HCS Department. Wine business courses have been taught by many AGB faculty over the years. Two current AGB faculty members have taught WVIT-related AGB courses almost exclusively in recent years, one of whom will still be assigned to teach the 4-unit AGB 405 course for two quarters each year. Computer lab classrooms needed for the wine business classes have been provided by the AGB Department. Finally, a full-time temporary lecturer manages the internship program, and teaches a wine sales class with funding through the Horticulture and Crop Science Department.

We propose that each of the faculty members that have been teaching required courses in the WVIT curriculum be transferred into the new Department. Following these transfers, the new WVIT Department will include ~5.3 ladder-rank faculty positions, and ~2.5 temporary lecturers. Proposed teaching assignments for the WVIT courses are listed in Appendix II. The overall impact of these transfers on teaching in the former home departments will be minimal. Transfer of Ritchie, Cooper, and Brain will have no impact on teaching in the FSN Department, and transfer of the Patterson position will have no impact on teaching in the HCS Department. Wolf will continue to teach 2 AGB courses, and Costello will continue to teach his normal complement of PPSC courses (PPSC 110, 311, 421, and 431).

Most of the WVIT lecture courses will continue to be taught in general assignment classrooms throughout campus. Specialized Wine and Viticulture courses, however, are being taught in space controlled by AGB, FSN and HCS. Until construction of a new campus winery building is complete, all of this teaching space needs to be made available to the new Department. Viticulture courses have been taught in the teaching classrooms and a dedicated Viticulture "lab" housed in the Crops Unit (Building 17). Responsibility for the 15-acre Trestle Vineyard (13 acres planted) used for viticulture classes was transferred to the Program last summer, though responsibility for the smaller variety block vineyard was retained by

HCS. Specialized enology courses are currently taught in Building 24 (sensory analysis, wine analysis and amelioration), and in the campus Pilot Winery (in the Crops Unit). Computer classrooms used to teach the wine business classes are housed in Building 10. Space for a Department office should become available following the movement of the Natural Resource Management and Environmental Sciences Department into the new Science Building this spring/summer. The new Department will also need office space to assign to the many Lecturers who are hired to teach required courses.

Timing of Department Formation

For a variety of reasons, the WVIT Program is at a critical juncture in its evolution. The program faculty is hopeful that a new Wine and Viticulture Department can be formed before the start of the Fall 2013 academic quarter.

Future Growth of Wine and Viticulture

Growth of the California wine industry continues to be impressive, and both student demand for wine and viticulture courses, and wine industry demand for hiring Cal Poly graduates remain very strong. Since the Wine and Viticulture academic programs began in the late 1990s, the number of faculty involved in the Program has declined significantly. As a consequence of limited teaching resources, enrollment in the academic minor was stopped in 2011. Dual-concentration for WVIT majors, seen by both students and industry employers as excellent value-added to the WVIT degree, was stopped in 2012. Enrollment in the major, and in many required courses, remains restricted. Required viticulture courses are offered only one quarter per year, leading to large upper division enrollments and slowing student graduation rates. Several of the required enology courses are offered only one or two quarters per year, also leading to large enrollments and slowing student graduation rates. Reopening the minor, expanding the major and allowing dual-concentrations, and developing stronger industry relationships are all vital for the long-term success of Wine and Viticulture at Cal Poly. Achieving success will depend upon new campus resources, specifically new faculty positions and teaching/research space.

References

Euromonitor International, "WINE IN THE US," Global Market Information Data Base, February 2012

Stonebridge Research Group, "The Economic Impact of Napa County's Wine and Grapes Prepared for Napa Valley Vintners," A STONEBRIDGE RESEARCH REPORT, November 2012, http://www.napavintners.com/downloads/napa_economic_impact_2012.pdf, accessed February 3, 2013.

APPENDIX I. WVIT Major requirements

Core Courses (required by all three concentrations)

AGB 214 Financial Accounting

AGB 401 Managing Cultural Diversity in Agricultural Labor Relations (USCP

BRAE 340 Irrigation Water Management

CHEM 111 Survey of Chemistry
MATH 118 Pre-Calculus Algebra
or MATH 161 Calculus for Life Sciences I (B1)
or MATH 221 Calculus for Business and Economics
SS 121 Introductory Soil Science
STAT 218 Applied Stats for the Life Sciences (B1)
or STAT 217 Introduction to Statistical Investigations (B1)
WVIT 101 Orientation to Wine and Viticulture
WVIT 102 Global Wine and Viticulture
WVIT 202 Fundamentals of Enology
WVIT 210 Viticultural Practices
WVIT/FRSC 231 Viticulture 1
WVIT/FRSC 331 Viticulture 2
WVIT 339 Internship in Wine and Viticulture
WVIT 343 Branded Wine Marketing
WVIT 423 Wine Law and Compliance
WVIT 442 Sensory Evaluation of Wine
WVIT 463 Issues, Trends and Careers in the Wine Industry

Wine Business Concentration

AGB 212 Agricultural Economics
AGB 310 Agribusiness Credit and Finance
AGB 323 Agribusiness Managerial Accounting
AGB 422 Logistics and Global Agribusiness
BIO 111 General Biology
ECON 222 Macroeconomics
WVIT 302 Wine Fermentation Laboratory
WVIT 433 Wine sales and e-commerce
WVIT 444 Wine Market Analysis
WVIT 450 Wine Business Plan
WVIT 460 Senior Project - Wine Business
Advisor Approved Electives

Viticulture Concentration

BOT 121 General Botany
BOT 323 Plant Pathology
CHEM 312 Survey of Organic Chemistry
ECON 201 Survey of Economics
PPSC 311 Agricultural Entomology
PPSC 321 Weed Biology and Management
SS 221 Fertilizers and Plant Nutrition
WVIT 302 Wine Fermentation Laboratory
WVIT 414 Grape Pest Management

WVIT 415 Grapevine Physiology
WVIT 424-427 Winegrape Growing and Vineyard Management I,II,III,IV
WVIT 461-462 Senior Project I, II - Enology and Viticulture
Advisor Approved Electives

Enology Concentration

CHEM 312 Survey of Organic Chemistry
CHEM 313 Survey of Biochemistry and Biotechnology
ECON 201 Survey of Economics
MCRO 221 Microbiology
WVIT 203 Anatomy of a Wine
WVIT 301 Wine Microbiology
WVIT 365 Wine Analysis and Amelioration
WVIT 404-406 Winemaking I,II,III
WVIT 461-462 Senior Project I, II - Enology and Viticulture
Advisor Approved Electives

APPENDIX II. Wine and Viticulture courses and teaching assignments

	Course Title	Units	F	W	S	Su	
WVIT 101	Orientation to Wine and Viticulture	1	X		X		Cooper
WVIT 102	Global Wine and Viticulture	4	X		X		Staff
WVIT 202	Fundamentals of Enology	4	X	X	X		Brain
WVIT 203	The Anatomy of a Wine	2			X		Ritchie
WVIT 210	Viticultural Practices	2	X	X	X		Costello, Staff
WVIT 231	Viticulture	4			X		Staff
WVIT 301	Wine Microbiology	4			X		Staff, (lab-Bio)
WVIT 302	Wine Fermentation Laboratory	2	X				Cooper
WVIT 311	Survey of Viticulture	4					Staff
WVIT 331	Advanced Viticulture	4	X				Staff (Costello)
WVIT 339	Internship in Wine and Viticulture	4-12	X	X	X	X	Ferrara, Cooper
WVIT 343	Branded Wine Marketing	4	X	X	X		Wolf, Amspacher
WVIT 365	Wine Analysis and Amelioration	4			X		Staff, (lab-FSN)
WVIT 400	Special Topics	2-6	X	X	X		Staff
WVIT 404	Winemaking I	4	X				Ritchie, Brain
WVIT 405	Winemaking II	4		X			Ritchie, Brain
WVIT 406	Winemaking III	4			X		Ritchie, Brain
WVIT 414	Grape Pest Management	4			X		Costello
WVIT 415	Grapevine Physiology	4			X		Staff
WVIT 423	Wine Law and Compliance	4	X	X	X		Amspacher
WVIT 424	Winegrape Growing and Vineyard Management I	2	X				Staff
WVIT 425	Winegrape Growing and Vineyard Management II	2		X			Staff
WVIT 426	Winegrape Growing and Vineyard Management III	2			X		Staff
WVIT 427	Winegrape Growing and Vineyard Management IV	2				X	Staff
WVIT 433	Wine Sales and E-Commerce	4	X		X		Ferrara
WVIT 442	Sensory Evaluation of Wine	4	X		X		Ritchie, Brain
WVIT 444	Wine Market Analysis	4	X	X			Wolf
WVIT 450	Wine Business Plan	4	X	X	X		Wolf
WVIT 460	Senior Project-Wine Business	4	X	X	X		Amspacher, Wolf
WVIT 461	Senior Project I Enology & Vit	2		X			Staff
WVIT 462	Senior Project II Enology & Vit	2			X		Staff
WVIT 463	Issues, Trends and Careers in the Wine Industry	2		X	X		Cooper

State of California
Memorandum

CAL POLY
SAN LUIS OBISPO

To: Steven Rein
Chair, Academic Senate

Date: July 11, 2013

From: Jeffrey D. Armstrong
President



E-Copies: K. Enz Finken
A. Thulin
R. Cavaletto
J. Cooper
M. Pedersen

Subject: Response to Academic Senate Resolution AS-761-13
Resolution on Change of Administrative Status for Wine and Viticulture Program

This memo formally acknowledges receipt and approval of the above-entitled Academic Senate resolution, which was approved at the May 21, 2013, Academic Senate meeting and endorsed by the members of the Deans' Council at the April 15, 2013, Deans' Council meeting.

I hereby direct the Academic Programs Division to proceed with implementing this resolution. It is hoped that these changes will occur by the start of Fall Quarter 2013.